

# Translation  
10 Annexes

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## CLAIMS

JC13 Rec'd PCT/PTO 21 APR 2005

1. A system for displaying images with the aid of a spatial light modulator comprising:
  - 5 - a light source (1) emitting an illumination beam;
  - a spatial light modulator (2) comprising a matrix of pixels controlled by video control signals corresponding to a succession of image frames to be displayed;
- 10 - a matrix filter (3) formed of a mosaic of elementary filters of various colors, illuminated by said illumination beam and transmitting a spatially filtered color beam to the spatial light modulator (2),
- 15 - means for producing an image of said filter on an entrance face of the spatial light modulator;
- means of displacement for displacing said image of the filter (3) on the entrance face of the spatial light modulator (2) and
- 20 - a device (5) for controlling these means of displacement, making it possible to control at least one sequence of displacements of the image of the filter during each image frame,  
characterized in that the dimensions and the position
- 25 of each elementary filter are adapted so that the image of each of them on the entrance face of the spatial modulator (2) covers a plurality of pixels.
- 30 2. The system for displaying images as claimed in claim 1, characterized in that each displacement of a sequence corresponds to a multiple of the dimension of the image of an elementary filter on the entrance face of the spatial modulator (2).
- 35 3. The system for displaying images as claimed in claim 2, characterized in that said mosaic is monodimensional and includes only one column of elementary filters of various colors.

4. The system for displaying images as claimed in  
claim 2, characterized in that said mosaic is  
bidimensional and in that said elementary filters are  
5 arranged in several rows and several columns.

5. The system for displaying images as claimed in  
claim 4, characterized in that said mosaic is formed by  
the repetition of blocks of elementary filters, and in  
10 that these blocks exhibit identical contours and are  
each composed of at least two elementary filters of  
different colors.

6. The system for displaying images as claimed in  
15 claim 5, characterized in that said mosaic is an  
assemblage of identical patterns each comprising the  
same number of blocks and the same number of elementary  
filters of each color in each of the rows and in each  
of the columns of said pattern.

20 7. The system for displaying images as claimed in any  
one of claims 5 to 6, characterized in that each  
sequence of displacements of the image of the filter on  
the entrance face of the spatial light modulator allows  
25 the successive illumination of each pixel of the  
spatial light modulator by all the elementary filters  
of one and the same block.

30 8. The system for displaying images as claimed in  
claim 7, characterized in that, during each image  
frame, each pixel of the spatial light modulator is  
illuminated successively by all the elementary filters  
of a first block under the effect of a first sequence  
35 of displacements, then by all the elementary filters of  
at least one second block under the effect of at least  
one second sequence of displacements.

9. The system for displaying images as claimed in one

of claims 4 to 8, characterized in that all the sequences of displacements controlled by said control device (5) are adapted so that the integration of the images of the filter that are obtained over the set of 5 displacements of the sequence or sequences of each frame imparts a white colorimetry to the entrance face of the spatial light modulator (2).

10. The system for displaying images as claimed in  
claim 9 when it depends on claim 8, characterized in  
that said first and at least second sequences of  
displacements are adapted so that the integration of  
the images of the filter that are obtained over the set  
of displacements of any one of these sequences imparts  
15 a nonwhite colorimetry to the entrance face of the  
spatial light modulator (2).

11. The system for displaying images as claimed in  
claim 9, characterized in that said control device  
20 possesses the characteristics of a plurality of  
different sequences of displacements making it possible  
to impart a white colorimetry to the entrance face of  
the spatial light modulator and in that it selects,  
from among this plurality, different sequences for  
25 successive frames.